that the outcome of December's climate summit in Copenhagen was disappointing, but told climate activists not to despair. As the example of the FITs in the UK shows, climate policies may move very slowly, but still advance a little bit in the end.

The weather forecaster and commentator, Phillip Eden, writing in the *Daily Telegraph*, highlighted the approach of the international collaboration of researchers coordinating Acre (Atmospheric Circulation Reconstructions over the Earth). This is run jointly by climatologists in the UK, Australia and the US, coordinated by Robert Allen at the UK's Meteorological Office and Gilbert Compo at the University of Colorado, both trained in gathering historical data.

An orchestrated campaign is being waged against climate-change science to undermine public acceptance of man-made global warming

The project's chief aims are to discover, transcribe and digitise old weather records.This has been the work of many climatologists for more than a century and for most of that time "it was the preserve of dusty old scientists who had no interest in engaging with the media," writes Eden.

"There is still a lot of work to do, including recovering weather, sea temperature and ice observations from ships' logs, extracting climatological data from pre-independence weather diaries in America and from records kept by former European colonial powers."

A second arm of the organisation's work is 'reanalysis' — the redrawing of historical weather charts from the early twentieth century and late nineteenth century, using the recovered data, and extending this work back in time.

The results are then adjusted using modelling techniques to make the sequence of daily weather charts internally consistent. But, importantly, Eden adds: "all the results of Acre's research are placed online — for anyone to access." In a field now so contested as climate change, this may be a valuable way of moving forward, garnering crucial data and side-stepping the sceptics.

Forest change

New evidence suggests trees in the eastern US are growing at the fastest rate in more than two centuries. **Nigel Williams** reports.

While sceptics increasingly attack climate prediction data, other research shows increasingly that many parts of the world appear not be warming. Forests in the northern hemisphere could be growing faster than they were 200 years ago, according to a study of trees in eastern North America. Sean McMahon and colleagues at the Smithsonian Environmental Research Center in Edgewater, Maryland, report in the *Proceedings of the National Academy of Sciences* (published online) that the trees appear to have accelerated growth rates as a result of longer growing seasons and higher concentrations of carbon dioxide.

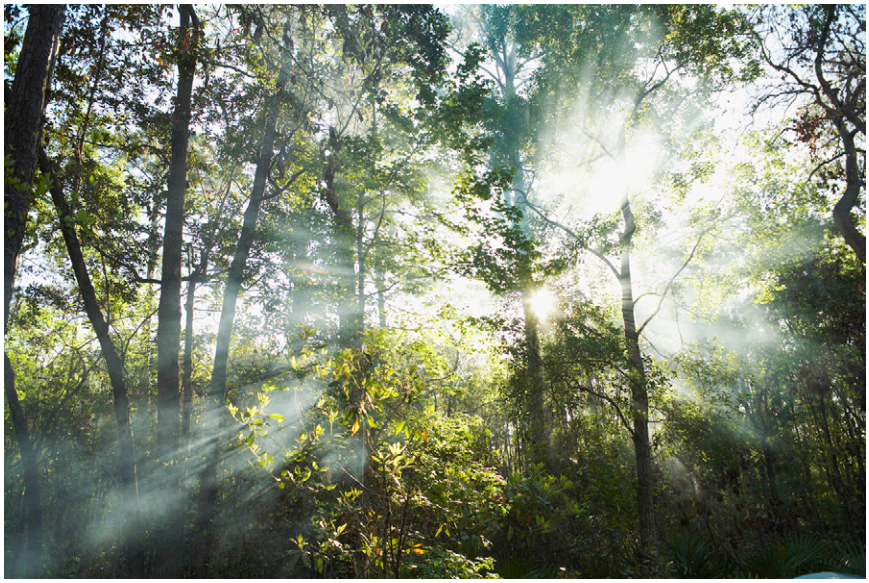
The researchers have documented the changes to the growth of 55 plots of mixed hardwood forest over a period of 22 years, and have concluded that they are probably growing faster now than at any time in the past 225 years — the age of the oldest trees in the study.

Geoffrey Parker, a forest ecologist working on the study, said that the increase in rate of growth was unexpected and might be matched to the higher temperatures and longer growing seasons documented in the region. The growth may also be influenced by the significant increase in atmospheric carbon dioxide, he said.

Parker and his colleagues have carried out a detailed census of the trees on a regular basis since 1987, measuring every tree and sapling that has a diameter of more than 2 cm. They calculated that the forest is producing an additional two tonnes of wood per acre per year, which is equivalent to a tree with a diameter of two feet sprouting up in the space of a year.

The team identified a number of plots with trees at different stages of growth and found that both young and old trees were showing increased growth rates. More than 90 per cent of the tree groups had grown by between two and four times faster than the researchers had predicted from the estimates of the long-term rate of growth.

During the same period, the team measured the concentration of carbon dioxide in the forest air and found that it had risen by 12 per cent. The average temperature had increased by 0.3ºC and the growing season had lengthened by 7.8 days. "These results signal a pressing need to better understand the changes in growth rates in forests," the authors say.



Booming: Research suggests that trees in the eastern US, like in this forest in Georgia, are growing at a rate unseen in two centuries, as a result of climate change. (Photo: Photolibrary.)